1. First, find the equation of the line containing the two points below. Then, write the equation in the form y = mx + b and choose the intervals that contain m and b.

$$(3,8)$$
 and  $(4,2)$ 

A. 
$$m \in [-11, -5]$$
  $b \in [26, 27]$ 

B. 
$$m \in [3, 9]$$
  $b \in [-24, -21]$ 

C. 
$$m \in [-11, -5]$$
  $b \in [-10, -1]$ 

D. 
$$m \in [-11, -5]$$
  $b \in [-26, -23]$ 

E. 
$$m \in [-11, -5]$$
  $b \in [4, 8]$ 

2. Solve the equation below. Then, choose the interval that contains the solution.

$$-14(2x - 19) = -10(17x - 16)$$

A. 
$$x \in [-3.01, -2.31]$$

B. 
$$x \in [2.85, 3.54]$$

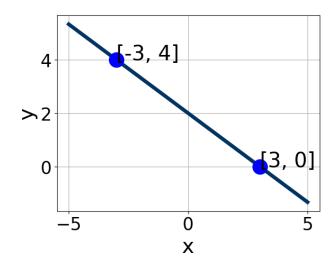
C. 
$$x \in [2.03, 2.61]$$

D. 
$$x \in [-0.76, -0.56]$$

- E. There are no real solutions.
- 3. Write the equation of the line in the graph below in Standard Form Ax + By = C. Then, choose the intervals that contain A, B, and C.

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Version A



- A.  $A \in [1.75, 2.91], B \in [-3.69, -2.65], \text{ and } C \in [-6.6, -2.8]$
- B.  $A \in [0.41, 1.52], B \in [0.76, 1.89], \text{ and } C \in [1, 3.1]$
- C.  $A \in [0.41, 1.52], B \in [-1.97, -0.93], \text{ and } C \in [-3.9, 0.2]$
- D.  $A \in [1.75, 2.91], B \in [2.11, 4.64], \text{ and } C \in [5.6, 7.5]$
- E.  $A \in [-2.7, -0.81], B \in [-3.69, -2.65], \text{ and } C \in [-6.6, -2.8]$
- 4. Find the equation of the line described below. Write the linear equation in the form y = mx + b and choose the intervals that contain m and b.

Parallel to 8x - 5y = 12 and passing through the point (-6, -5).

- A.  $m \in [1.37, 1.62]$   $b \in [-7.6, -3.6]$
- B.  $m \in [0.41, 0.7]$   $b \in [2.6, 5.6]$
- C.  $m \in [-1.74, -0.49]$   $b \in [-18.6, -11.6]$
- D.  $m \in [1.37, 1.62]$   $b \in [0, 2]$
- E.  $m \in [1.37, 1.62]$   $b \in [2.6, 5.6]$
- 5. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{-7x+4}{3} - \frac{-6x-5}{2} = \frac{5x+7}{5}$$

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A. 
$$x \in [4.5, 6.5]$$

B. 
$$x \in [-9.6, -6.7]$$

C. 
$$x \in [-1.4, 1.5]$$

D. 
$$x \in [6.6, 7.6]$$

- E. There are no real solutions.
- 6. Find the equation of the line described below. Write the linear equation in the form y = mx + b and choose the intervals that contain m and b.

Parallel to 4x - 7y = 14 and passing through the point (-8, -6).

A. 
$$m \in [-0.02, 0.95]$$
  $b \in [1.67, 2.54]$ 

B. 
$$m \in [1.64, 2.32]$$
  $b \in [-1.62, -1.29]$ 

C. 
$$m \in [-0.02, 0.95]$$
  $b \in [-0.04, 1.6]$ 

D. 
$$m \in [-0.02, 0.95]$$
  $b \in [-1.62, -1.29]$ 

E. 
$$m \in [-1.06, 0.39]$$
  $b \in [-11.81, -8.98]$ 

7. Solve the equation below. Then, choose the interval that contains the solution.

$$-17(-16x - 3) = -14(-7x - 4)$$

A. 
$$x \in [-0.22, 0.15]$$

B. 
$$x \in [-0.33, -0.2]$$

C. 
$$x \in [-0.79, -0.61]$$

D. 
$$x \in [0.34, 0.76]$$

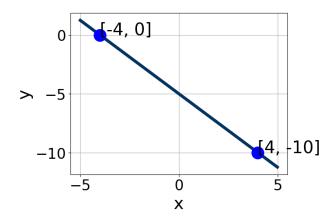
- E. There are no real solutions.
- 8. First, find the equation of the line containing the two points below. Then, write the equation in the form y = mx + b and choose the intervals

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that contain m and b.

$$(-9,6)$$
 and  $(-5,-4)$ 

- A.  $m \in [1.5, 5.5]$   $b \in [8.2, 9.8]$
- B.  $m \in [-6.5, -1.5]$   $b \in [0.9, 1.2]$
- C.  $m \in [-6.5, -1.5]$   $b \in [-18.8, -14.7]$
- D.  $m \in [-6.5, -1.5]$   $b \in [16, 16.9]$
- E.  $m \in [-6.5, -1.5]$   $b \in [13.6, 15.9]$
- 9. Write the equation of the line in the graph below in Standard Form Ax + By = C. Then, choose the intervals that contain A, B, and C.



- A.  $A \in [-1.3, 3.1], B \in [-0.06, 1.87], \text{ and } C \in [-6, 1]$
- B.  $A \in [-1.3, 3.1], B \in [-1.57, -0.25], \text{ and } C \in [4, 6]$
- C.  $A \in [3.1, 8.7], B \in [3.44, 4.03], and <math>C \in [-21, -19]$
- D.  $A \in [-5.6, -4.8], B \in [-4.51, -2.73], \text{ and } C \in [12, 24]$
- E.  $A \in [3.1, 8.7], B \in [-4.51, -2.73], \text{ and } C \in [12, 24]$
- 10. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{4x+6}{3} - \frac{4x+6}{7} = \frac{3x+4}{8}$$

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- A.  $x \in [-2.8, -1.6]$
- B.  $x \in [9.8, 10.6]$
- C.  $x \in [-6.2, -5.6]$
- D.  $x \in [-0.1, 2]$
- E. There are no real solutions.

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